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(12) **United States Patent
Binder**

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(54) **SYSTEM AND METHOD FOR CONTROL
BASED ON FACE OR HAND GESTURE
DETECTION**

(75) Inventor: **Yehuda Binder**, Hod Hasharon (IL)

(73) Assignee: **May Patents Ltd.**, Hod-Hasharon (IL)

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4,047,187 A	9/1977	Mashimo et al.
4,169,663 A	10/1979	Murr
4,317,991 A	3/1982	Stauffer
4,367,027 A	1/1983	Stauffer
RE31,370 E	9/1983	Mashimo et al.
4,567,610 A	1/1986	McConnell
4,595,990 A	6/1986	Garwin et al.
4,638,364 A	1/1987	Hiramatsu
4,703,247 A	10/1987	Morioka

(Continued)

FOREIGN PATENT DOCUMENTS

DE	19737449	2/1999
DE	10335766	11/2004

(Continued)

OTHER PUBLICATIONS

International Search Report dated Oct. 15, 2010.

(Continued)

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USPC **345/158**

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,783,508 A	1/1974	Brown et al.
4,019,252 A	4/1977	Port et al.

Primary Examiner — Kenneth Bukowski

(74) *Attorney, Agent, or Firm* — Browdy and Neimark,
PLLC

(57) **ABSTRACT**

System and method for control using face detection or hand
gesture detection algorithms in a captured image. Based on
the existence of a detected human face or a hand gesture in an
image captured by a digital camera, a control signal is gen-
erated and provided to a device. The control may provide
power or disconnect power supply to the device (or part of the
device circuits). The location of the detected face in the image
may be used to rotate a display screen to achieve a better line
of sight with a viewing person. The difference between the
location of the detected face and an optimum is the error to be
corrected by rotating the display to the required angular posi-
tion. A hand gesture detection can be used as a replacement to
a remote control for to the controlled unit, such as a television
set.

13 Claims, 59 Drawing Sheets

